Wall Brace Anchors

The Wall Brace Anchor is designed for use in panels where the brace is to be attached to the "up face" of the panel as it lies on the casting slab. They are available in 3/4" coil diameter for use with standard coil threaded bolts. The legs are plastic tipped to protect against rust stains on the face of the panel. Wall Brace Inserts are supplied with a plastic setting plug installed and popular sizes are available in all locations.

Inverted Wall Brace Anchors

The Inverted Wall Brace Anchor is designed for use in panels where the brace is to be attached to the "down face" of the panel after it is lifted from the casting slab. They may also be used where it is necessary to attach ledgers

to the "down face" of the panel after lifting. Inverted Wall Brace Anchors are available in 3/4" coil diameter for use with standard coil threaded bolts.

The legs are plastic tipped to protect against rust stains on the face of the panel. Inverted Wall Brace Anchors are supplied with a plastic setting plug installed.

Strongbacking

When openings are required in panels, they will normally create extreme bending stresses in the remaining concrete sections: Properly installed strongbacks will increase the stiffners of the panel and reduce these bending stresses. Sometimes strongbacking cap be eliminated by increasing the amount of reinforcing stee/in the panel. When this is not sufficient, external strongbacking will be required. The most economical method of strongbacking is accomplished by attaching wood or steel beams to inserts embedded in panel legs. Standard brace and lift inserts provide excellent anchorage for strongbacks. Strongback Hardware normally includes a continuous thread coil bolt, a

capacity of coil type inserts without increasing their depth of embedment.

The expanded pitch coils welded to the more deeply embedded end of the insert serve to distribute the applied loads over a larger volume of concrete. Expanded Coil Inserts are available for use with coil bolts or national coarse thread machine bolts.

Coil Loop Insert Protectors

Coil Loop Insert Protectors are used to secure coil loop inserts to forms and protect the threads during concrete placement. These reusable plastic bolts are available for 1/2", 3/4" and 1" diameter inserts.

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NATIONAL COARSE THREADED INSERTS

National Coarse Threaded Inserts are inserts of various design for use with national coarse threaded machine bolts. Cast and ferrule inserts are available in sizes ranging from 1/4" to 1-172".

Ferrule Loop Insert

The Ferrule
Loop Insert
consists of a
closed bottom,
national coarse
threaded ferrule
welded to a wire
loop. It is
primarily used
for the
anchorage of wall

anchorage of wall panels, suspended ceilings, sprinkler systems, plumbing and heating pipes and ductwork and other miscellaneous anchoring. Popular sizes are in stock in all MCS locations.

F5 Threaded Insert
The F5 Threaded Insert is a

Order Direct 800-371-5225 Or click here for email form



NC Threaded Inserts

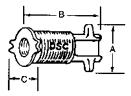
For Suspending, Connecting and Anchoring to Concrete



F-5 Threaded Insert

The Dayton/Richmond F-5 Threaded Inserts have National Course (NC) threads and are recommended for use under permanent loading conditions. This insert has been approved by the Board of Standards and Appeals for use in New York City under Calendar No. 447-60SM.

The F-5 insert is cast from ductile iron that meets ASTM A-395, Grade 60-40-18.



F-5 Threaded Insert

To Order:

Specify: (1) quantity, (2) name,

(3) bolt diameter.

Example:

200, F-5 Threaded Inserts, 3/4" bolt diameter.

| Bolt Diameter and Threads per Inch | Tension Safe Working Load | Bolt Engagement | A | В | С | |
|--|------------------------------|--------------------|----------|--------|--------|--|
| 1/2" 13 | 1,500 lbs. | 15/16" | 1-5/8" | 2-1/2" | 1-5/8" | |
| 5/8" – 11 | 2,000 lbs. | 3/4" | 1-5/8" | 3" | 1-5/8" | |
| 3/4" – 10 | 2,500 lbs. | 7/8" | 1-13/16" | 3" | 1-7/8" | |
| 7/8" — 9 | 3,000 lbs. | 1-5/16" | 2-1/2" | 3-3/8" | 2-5/8" | |
| 1" – 8 | 3,000 lbs. | 1-5/16" | 2-1/2" | 3-3/8" | 2-5/8* | |

Safe Working Load provides a factor of safety of approximately 3 to 1 when the insert is properly embedded in 3,000 psi normal weight concrete.

F-42 Loop Ferrule Insert

The Dayton/Richmond F-42 Loop Ferrule Insert is fabricated by welding a looped strut to a closed-end ferrule. F-42 insert is available in the sizes shown in the chart below and is well suited for structural connections and the suspension of equipment, piping, atc.

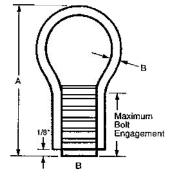
Minimum spacing between inserts is twice the minimum corner distance.

To Order:

Specify: (1) quantity, (2) name, (3) bolt diameter.

Example:

200, F-42 Loop Ferrule Inserts, 3/4" bolt diameter.



F-42 Loop Ferrule Insert

| | M.S.M.C | F-42 Lc | op Ferrule Ins | ert Selection C | hart | | |
|--|-----------------------------|-------------------------------|---------------------------------|-------------------------------|----------------------------|--------|--------|
| Bolt Diameter and Threads per Inch | Minimum Edge Distance | Minimum Corner Distance | Safe Working Load Tension | Safe Working Load Shear | Maximum Bolt Engagement | Α | В |
| 1/4" - 20 NC | 5" | 5* | 650 lbs. | 650 lbs. | 3/4" | 2-3/4" | 0.243" |
| 3/8" 16 NC | 5" | 5" | 2,000 lbs. | 1,000 lbs. | O(4II | 0.0/48 | |
| 070 - 10110 | 7° | 7" | 2,000 lbs. | 2,000 lbs. | 3/4" | 2-3/4" | 0.243" |
| 1/2" - 13 NC | 5" | 5" | 2,000 lbs. | 1,000 lbs. | 9.4.1.27000 83.4.0 83 | | |
| | 7* | 7" | 2,000 lbs. | 2,000 lbs. | | 2-3/4" | 0.243 |
| 5/8" – 11 NC | 5" | 7" | 2,200 lbs. | 1,375 lbs. | 7 4 600 | | G 0000 |
| | 8" | 8" | 2,200 lbs. | 2,200 lbs. | 1-1/8" | 3-1/2" | 0.258" |
| 3/4" ~ 10 NC | 5" | 7 " | 2,200 lbs. | 1,375 lbs. | | | 70.144 |
| | 8" | 8 | 2,200 lbs. | 2,200 lbs. | 1-1/8" | 3-1/2* | 0.258* |
| 7/8" - 9 NC | 8" | 8" | 5,300 lbs. | 3,375 lbs. | 1 1 (0) | | |
| 770 - 5110 | 10" | 10" | 5,300 lbs. | 5,300 lbs. | 1-1/8" | 6" | 0.375" |
| 1" – 8 NC | 8" | 8" | 5,300 lbs. | 3,375 lbs. | | AZ jiy | |
| . 5110 | 10" | 10" | 5,300 lbs. | 5,300 lbs. | 1-1/8" | 6" | 0.375" |

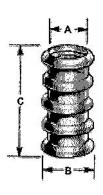
Safe Working Load provides a factor of safety of approximately 3 to 1 in 3,000 psi normal weight concrete. Safe Working Loads are based on 1/2" setback from face of concrete.

INSERTS AND ACCESSORIES

F10 Threaded Ferrule Insert

For anchoring stadium seats, plumbing fixtures, electrical hangers or hundreds of applications that require a light duty cast in place threaded insert. Works with N.C. threaded bolt. Not recommended for use as an edge lift insert.

| Inside Diameter (A) | Outside Diameter (B) | Tap Depth | Ferrule Length (C) | | |
|---------------------------|----------------------------|-----------|-----------------------|--|--|
| 1/4" | 9/16" | 3/4" | 1-1/4" (32mm) | | |
| 3/8" | 9/16* | 3/4" | 1-1/4" (32mm) | | |
| 1/2" | 11/16" | 1" | 1-3/8" (35mm) | | |
| 5/8" | 7/8" | 1-1/8" | 1-5/8" (41mm) | | |
| 3/4" | 1" | 1-1/8" | 1-5/8" (41mm) | | |
| 7/8" | 1-3/8" | 1-1/8" | 1-5/8" (41mm) | | |
| 1" | 1" 1-3/8" 1-1 | | 1-5/8" (41mm) | | |
| 1-1/4" | 1-5/8" | 1-3/8" | 2" (51mm) | | |

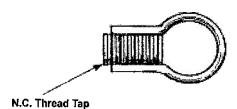


F16 Ferrule Loop Insert

Designed for use extensively as permanent structural connection insert for pre-cast elements. Ferrule is close on back end for prevention of entering grout. Rebar may be inserted through loop for additional safety.

| Size | S.W.L. Lbs./kN | Concrete PSI | |
|----------------------|-------------------|-----------------|--|
| 3/8" x 2-3/4" (67mm) | 2000/ 8.9 | 3,000 | |
| 1/2" x 2-3/4" (67mm) | 2000/ 8.9 | 3,000 | |
| 5/8" x 3-1/2" (85mm) | 2300/ 10.2 | 3,000 | |
| 3/4" x 3-1/2" (85mm) | 2400/ 10.7 | 3,000 | |
| 7/8" x 6" (149mm) | 5300/ 23.6 | 3,000 | |
| 1" x 6" (149mm) | 5300/ 23.6 | 3,000 | |

Safety factor 4:1. Dimensions are approximate

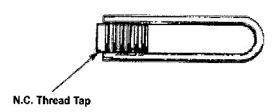


F15 Straight Loop Ferrule Insert

An economical insert used as a connection unit. The ferrule is tapped N.C. and may be used for lifting small pre-cast elements. Longer loops and heavier gauge wire may be special ordered. Not recommended for edge lifting.

| Size | S.W.L. Lbs./kN | Concrete PSI | |
|-------------------|-------------------|-----------------|--|
| 1/2" x 4" (100mm) | 3000/13,3 | 3,000 | |
| 1/2" x 6" (150mm) | 4000/17.8 | 3,000 | |
| 5/8" x 4" (100mm) | 3000/13.3 | 3,000 | |
| 5/8" x 6" (150mm) | 5000/22.2 | 3,000 | |
| 3/4" x 4" (100mm) | 3000/13.3 | 3,000 | |
| 3/4" x 6" (150mm) | 5000/22.2 | 3,000 | |
| 1" x 6" (150mm) | 5000/22.2 | 3,000 | |
| 1" x 8" (200mm) | 5000/22.2 | 3,000 | |

Safety factor 4:1. Dimensions are approximate



Williams Forms.